

Meeting Minutes of the Subcommittee on Disaster Reduction

05 June 2014, 10:00 a.m. to 12:00 p.m., White House Conference Center Lincoln Room

Italics indicate absent members. "T" indicate members participating via teleconference.

Co-chairs

David Applegate (USGS)
Margaret Davidson (NOAA)
Dennis Wenger (NSF)

OSTP Liaison

Tamara Dickinson (OSTP)

Designated Representatives

BLM *Edwin Roberson*
CDC *Mark Keim*
DHS *Mary Ellen Hynes*
DHS/FEMA *Roy Wright*
DHS/USCG *Robert Thomas*
DOD *Al Johnson*
DOE *Patricia Hoffman*
DOT *Sheila Duwadi*
EOP/OMB *Michael Clark*
EOP/OSTP *Tamara Dickinson*
EPA *Peter Jutro*
Stephen Clark

FERC *Marsha Palazzi*
HUD *Dana Bres*
NASA *Craig Dobson*
NGA *Patricia Allen Aquinas (T)*
NGB *TBD*
NIH *Aubrey Miller*
NIST *Steve Cauffman*
NOAA *Margaret Davidson*
Christopher Strager
NPS *Marcy Rockman*
NSF *Dennis Wenger*
OPHS *Estella Jones (T)*

State *Fernando Echavarría*
USACE *Steven Cary*
Dimitra Syriopoulou
USAID *Sezin Tokar*
USDA *TBD*
USFS *Richard Guldin*
Elizabeth Reinhardt
Carlos Rodriguez-Franco
USGS *David Applegate*
USNRC *Steven West*

Other Attendees

BLM *Nancy Dean*
Ronald McCormick
DHS *Mitch Erickson (T)*
Meredith Lee
Erin Walsh
DOI *Jenna Sloan (T)*
EOP/NSC *Eric Letvin*
Greg Shelton
EOP/OSTP *Brian Forde (T)*
Tim Stryker

EPA *Brendan Doyle*
Paul Kudarauskas
Keely Maxwell
NASA *Frank Lindsay*
NIH *April Bennett*
NOAA *Katya Wolk (T)*
NPS *Ann Hitchcock (T)*
NSF *Gregory Anderson (T)*
Kishor Mehta

USGS *Kiza Gates*
Kris Ludwig
USNRC *Brett Rini*
NBM *Chrysanthe Broikos*
STPI *Mitch Ambrose*
Chris Clavin
SDR Secretariat *Bret Schothorst*
Barbara Haines-Parmelee

Agenda

10:00 Welcome and Introductions
10:05 Report from the Co-chairs and Approval of Minutes
10:20 Report from the OSTP Liaison
10:30 Presentation: National Building Museum "Designing for Disaster" Exhibit
11:00 Briefing: NOAA 2014 Hurricane Season Outlook
11:40 Briefing: OSTP Technology and Data Innovation for Disasters
11:55 Close and Next Actions

Handouts

- June Meeting Agenda
- Draft May Meeting Minutes

I. Welcome and Introductions

National Science and Technology Council (NSTC) Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the June meeting to order at 10:01 a.m. in the Lincoln Room of the White House Conference Center (WHCC), and participants introduced themselves.

II. Report from the Co-chairs and Approval of Minutes

The May monthly meeting minutes were approved with no changes.

In the report from the Co-chairs, Applegate noted that the SDR Wildland Fire Science and Technology Task Force plans to hold a three-day workshop June 17-19, 2014 at the DOI Main Interior Building North Penthouse Room to inventory current agency roles and responsibilities and establish a resource baseline related to wildfire activities. The main goal of the workshop is for Task Force member agencies to learn more about each other's capabilities and requirements and for members to begin to identify opportunities for coordination and cooperation. Applegate stated that an email with the workshop agenda and an agency briefing template will be circulated to the group's designated agency representatives in the coming days. Please let the SDR Secretariat (bret.schothorst@mantech.com) know ASAP if your agency is interested in participating in the Task Force or the workshop.

Co-chair Dennis Wenger (NSF) encouraged SDR agencies to consider providing funding support to the University of Colorado Boulder's Natural Hazards Center to assist the institute with their mission to advance and communicate knowledge on hazards mitigation and disaster preparedness, response, and recovery and to foster information sharing and integration of activities among researchers, practitioners, and policymakers. Regular Federal contributors in the past have included: NSF, NOAA, DOT, DHS, FEMA, USGS, NASA, Army Corps, and the U.S. Forest Service. Please contact Wenger ([dwenger@nsf.gov](mailto:d Wenger@nsf.gov)) for more information if interested in contributing to this important fundraising effort.

Wenger also reminded members that the Subcommittee's International Working Group (IWG) will meet this afternoon from 1:00 p.m. to 2:30 p.m. in the WHCC Lincoln Room. At the working group's June meeting, the IWG will finalize details of the U.S. National Platform multi-sectoral listening session at the upcoming 39th Annual Natural Hazards Center Workshop (June 22, 2014, from 7:00-9:00 p.m. MDT at the Omni Interlocken Resort in Broomfield, Colorado) to inform U.S. positions on the second iteration of the UNISDR Hyogo Framework for Action, known as HFA2+.

USGEO Program Director Tim Stryker (OSTP) mentioned that SDR's sister NSTC subcommittee is seeking nominations to participate in the upcoming second portfolio assessment of civil earth observation systems. In response to congressional guidance, which calls for a National Plan for Civil Earth observations to be developed and updated every three years, OSTP requests that the SDR nominate representatives for participation in the disasters and space weather societal benefit areas (SBA). OSTP requested that nominations for SBA team members be provided no later than June 12, 2014, to Stryker (tstryker@ostp.eop.gov).

Meredith Lee (DHS S&T) mentioned that the first-ever "DC Mini Maker Faire" will be held this Sunday, June 8, 2014, from 11:00 a.m. to 7:00 p.m. at Yards Park's Ideospace DC in Washington, DC. Opportunities for government involvement include: helping with a 3D sculpture, capturing "what excites you about Making," contributing ideas for a Government & Maker Playbook, speaking about prototyping and innovation, and showcasing your agency's Maker efforts. Lee encouraged members to sign up to participate in the exhibit at <http://bit.ly/DCMakerCall> or by visiting <http://bit.ly/makergov> to volunteer. For a free ticket to attend, go to <http://www.eventbrite.com/e/dc-mini-maker-faire-tickets-11011689259> or contact info@makerfairedc.com.

April Bennett (NIH) shared that the Institute of Medicine Forum on Medical and Public Health Preparedness for Catastrophic Events, in collaboration with the National Institute of Environmental Health Sciences (NIEHS), the Office of the Assistant Secretary for Preparedness and Response (ASPR), the National Library of Medicine (NLM) and the Centers for Disease Control and Prevention (CDC), will hold a workshop for stakeholders with interest in advancing the state of disaster research June 12-13, 2014, on the campus of NIH in Bethesda, Maryland. The workshop will include Federal, state, and local researchers, responders, and planners and will explore a broad range of issues related to mechanisms and barriers to rapid response. Please visit <http://iom.edu/Activities/PublicHealth/MedPrep/2014-JUN-13.aspx> for more information or contact Bennett (april.bennett@nih.gov) to register to attend.

Keely Maxwell (EPA) noted that her agency is hosting an upcoming workshop to explore the environmental aspects of disaster resilience as they seek to develop a Community Environmental Resilience Index (CERI). The workshop will be held July 22-23, 2014, at EPA's One Potomac Yard South Building in Arlington, Virginia, and is being sponsored by EPA's Homeland Security Research Program. To attend, please contact Maxwell (Maxwell.Keely@epa.gov) or RSVP at: <https://www.surveymonkey.com/s/CERIJuly>.

III. Presentation: National Building Museum “Designing for Disaster” Exhibit

Applegate introduced Chrysanthe Broikos, who is Curator of the “Designing for Disaster” exhibit at the National Building Museum (NBM). She presented highlights from the gallery, which runs at the museum through August 2, 2015.

Broikos began her presentation by covering some general information about the NBM. The museum is a privately owned, non-profit organization and is not part of the Smithsonian, although the museum is located downtown in a Federal building managed by GSA. Broikos noted that the NBM is a hybrid museum in that it's not exclusively focused on history, art, or science, but rather, a unique mix of disciplines that takes a holistic approach to the built environment – which encompasses architecture, urban planning, engineering, and other broad areas associated with buildings.

She also provided background information on the exhibit, which examines how we assess risks from natural hazards and how we can create hazard mitigation policies, plans, and designs to reduce the impacts of disasters. The concept for the gallery began in 2008 after the I-35W Mississippi River Bridge collapse in Minneapolis, Minnesota. After several years of development and delays, the show finally opened on May 11, 2014 and was sponsored by a diverse group public and private entities, including LaFarge, the Home Depot Foundation, Andersen Windows & Doors Corporation, the American Red Cross, the Nature Conservancy, the National Fire Protection Association, the Institute for Business and Home Safety, Florida International University, FEMA, and HUD. Broikos noted that several additional Federal agencies served on the advisory council for the exhibit, including NOAA and USGS.

According to Broikos, through unique objects, captivating graphics, and multimedia displays – including video testimonials – the exhibition explores new solutions for, and historical responses to, a range of natural hazards, including earthquakes, tornadoes, hurricanes, storm surge, flooding, sea level rise, tsunamis, and wildfires. The show also focuses on disaster mitigation as an evolving science and highlights the tools and strategies that today's planners, engineers, designers, emergency managers, scientists, environmentalists, and various business and community leaders are investigating and adopting to build safer, more disaster-resilient communities. Broikos added that the gallery focuses on disasters that occur from natural hazards stemming from the earth, air, fire, and water elements.

A few of the “Designing for Disaster” gallery exhibits highlighted by Broikos included:

- A partially deconstructed FEMA-specified "safe room" that illustrates how it is built to withstand tornado-force winds and flying debris;

- A small-scale version of the "Wall of Wind" project modeled after Florida International University's wind testing facility that invites visitors to test various roof shapes against simulated hurricane-force winds to see which design performs best;
- A "Beat The Quake" game sponsored by the Earthquake Country Alliance that shows the importance of the "Drop, Cover, and Hold On!" instructions to follow during an earthquake;
- A button-activated set of moving stairs that show how the expansion joints within the seating bowl at the University of California, Berkeley's Memorial Stadium would actually perform in the event of an earthquake.
- A set of video presentations highlighting natural ecosystem solutions for increasing community resilience to hazards such as wildfires, coastal inundation, and sea level rise;
- A "What Can You Do?" quiz game to test exhibit visitors' knowledge of hazards mitigation measures; and
- A series of "Mitigation Milestones" spotlighting lessons learned after major disaster events and showcasing progress in emergency preparedness over the years.

In response to a question from Brendan Doyle (EPA), Broikos stated that the exhibit does not incorporate chemical, biological, nuclear, or radiological disasters and focuses solely on U.S. domestic disasters, not international ones. Broikos added that there are no current plans to travel the gallery or make it available virtually online due to funding limitations. Chris Strager (NOAA) mentioned that the "Designing for Disaster" exhibit would make an excellent partner with the NOAA National Weather Service Weather-Ready Nation Ambassador initiative that recognizes partners who are decreasing vulnerability and increasing resilience by raising awareness of extreme weather, water, and climate events.

Keely Maxwell (EPA) asked if the NBM encourages gallery visitors to take action against disasters when they exit the exhibit, and Broikos noted that they ask participants do three things at the end of the show: 1) create an emergency plan or preparedness kit; 2) talk to a local insurance agent about getting natural hazard insurance; and 3) share information with family, friends, or neighbors about what was learned at the exhibit. Broikos added in response to a question from Kris Ludwig (USGS) that the exhibit has plans to collaborate with FEMA on some interactive preparedness activities this coming September during National Preparedness Month.

Please contact Broikos (cbroikos@nbm.org) for more information about the "Designing for Disaster" exhibit. More information is also available on the web at: <http://www.nbm.org/exhibitions-collections/exhibitions/designing-for-disaster.html>.

IV. Briefing: NOAA 2014 Hurricane Season Outlook

Applegate introduced Chris Strager, who is Acting Director of the NOAA National Weather Service Office of Climate, Water, and Weather Services. He's also the official SDR representative from NOAA. He briefed the Subcommittee on the NOAA 2014 hurricane season outlook.

Strager opened by stating that NOAA annually issues seasonal hurricane outlooks for the Atlantic basin, the central Pacific, and the eastern Pacific Ocean. According to its latest forecast, the 2014 Atlantic outlook predicts – with a 70 percent probability of occurrence – near to below normal hurricane activity (8-13 named storms, 3-6 hurricanes, and 1-2 major hurricanes). Strager compared the below normal activity prediction for the Atlantic basin in 2014 to NOAA National Hurricane Center historical averages calculated between 1981 and 2010, which were 12 named storms, 6 hurricanes, and 3 major hurricanes. In 2013, NOAA predicted an above normal hurricane season for the Atlantic, but only 14 named storms, 2 hurricanes, and 0 major hurricanes occurred.

Strager noted that the lowered activity assessment for 2014 is based upon the presence of the El Niño phenomenon, which suppresses hurricane development in the Atlantic basin by strengthening the vertical

wind shear, trade winds, and atmospheric stability. Conversely, Strager noted that El Niño has the opposite effect on the Pacific basin, which can expect above normal storm activity in the coming months and into the winter. According to Strager, winter El Niño episodes tend to feature a strong jet stream and storm track across the southern part of the U.S. and less storminess and milder-than-average conditions across the North. Of the six strongest El Niño winters since 1950, three have been associated with well above normal snowfall in the mid-Atlantic region, while three have been well below normal. Strager noted as a caveat that while these predictions can vary wildly, generally speaking the stronger the El Niño, the warmer and wetter the winters have been in our area.

Strager then highlighted some innovative NOAA tropical storm products for 2014, including a new potential storm surge flooding map as well as a new 5-day graphical tropical weather outlook. These tools were a result of lessons learned from the NOAA impact assessment report conducted after Hurricane Sandy and were funded by the post-Sandy supplemental funding. Strager stated that these advancements were developed in conjunction with expert input from social scientists and are an attempt to allow the average citizen or emergency manager to graphically visualize storm surge threats on a cell phone. In response to a question from Eric Letvin (NSC) on projecting the probability of storm landfall for a given area, Strager noted that the NOAA National Hurricane Center and National Severe Storms Laboratory are using these technology improvements to pinpoint more accurate and advanced storm warnings and evacuation notices for affected areas during extreme events.

If SDR members have questions about the NOAA 2014 hurricane outlook or the El Niño phenomenon that will affect weather patterns in the U.S., please contact Strager (christopher.strager@noaa.gov).

V. Briefing: OSTP Technology and Data Innovation for Disasters

Applegate introduced Brian Forde, who is Senior Advisor to the U.S. Chief Technology Officer at the White House Office of Science and Technology Policy. Forde and colleague Meredith Lee (DHS S&T) updated the SDR on recent White House open data and technology innovation projects for disaster preparedness, response, and recovery.

Forde mentioned that since Hurricane Sandy in late 2012, OSTP has worked with over a thousand innovators and developers from government as well as the private, nonprofit, and academic sectors who are using freely available and open government data to build products, services, and apps that improve disaster preparedness and emergency response in creative and powerful ways. Social networking and online communication applications such as Airbnb, Twilio, Google Maps, and Twitter have been crucial to empowering the survivors of recent disasters, and Forde noted that more and more technology companies are expressing an interest in providing aid and helping during extreme events through the use of data and technology innovation.

In response to this flurry of activity, Forde proposed that this excitement and energy be channeled and formally incorporated into the SDR as a working group, which will focus on bringing all Federal hazards-related data into its own portal on data.gov (disaster.data.gov) and solving government proprietary issues related to the creation of open-source tools and the crowd-sourcing of information. According to Forde, a main goal of the potential working group could be to define technology and data problem statements for disasters collaboratively within the Federal agencies and relay those problem definitions out to the technology development community.

Showing how disasters and technology innovation are being brought together at EPA, Doyle said his agency was recently selected as a beta tester to role play Google Glass through a series of table top disaster exercises to figure out how the device can be most useful during extreme events. Frank Lindsay (NASA) stated that since there are several related technology and data innovation initiatives ongoing across the Federal government and in the private sector, it will be important for this project to connect to

other efforts as a means to clarify and understand the slate of current application offerings and to keep interest high and sustained in the project. Lee noted that the continued success and sustainability of the initiative over time will be a top priority as well as linking into other projects with similar objectives and keeping the hazards information up to date.

Strager added that the NOAA National Weather Service has faced issues recently with regards to the Federal government competing with private industry and for-profit businesses to build successful applications from free and open government data. Forde noted that this is a distinct and unique issue in the natural hazards community and that the market will decide more often than not which applications are most useful. Applegate added that while it's important to make sure timely hazards information is available to all, caution should be exercised in the application development phase so the Federal government doesn't end up getting caught in a competition with the private sector.

Please contact Forde (Brian_J_Forde@ostp.eop.gov) or Lee (meredith.lee@associates.hq.dhs.gov) with any questions about their open data and technology innovation projects for disaster preparedness, response, and recovery.

VI. Adjournment

Applegate adjourned the SDR June meeting at 11:58 p.m.

VII. Future Meetings

Upcoming SDR meetings in 2013 will be held from 10:00 a.m. to 12:00 p.m. on the dates listed below in the Lincoln Room of the White House Conference Center:

2014

- ✓ Thursday, July 10
- ✓ Thursday, September 4
- ✓ Thursday, October 2
- ✓ Thursday, November 6
- ✓ Thursday, December 4

VIII. Agenda Items and Other Communications with the Subcommittee

Please send proposed agenda items and any other items intended for distribution to the full Subcommittee to the SDR Secretariat Bret Schothorst (bret.schothorst@mantech.com).

IX. Contact Information

SDR Leadership

David Applegate	Co-chair	703-648-6600	applegate@usgs.gov
Margaret Davidson	Co-chair	843-740-1220	margaret.davidson@noaa.gov
Dennis Wenger	Co-chair	703-292-8606	dwenger@nsf.gov
Tamara Dickinson	OSTP Liaison	202-456-6105	tdickinson@ostp.eop.gov

Secretariat

Bret Schothorst	703-388-0312	bret.schothorst@mantech.com
Barbara Haines-Parmelee	703-388-0309	barbara.haines-parmelee@mantech.com

X. Summary of June Actions

Action	Lead	By When
Let the SDR Secretariat (bret.schothorst@mantech.com) know if agencies wish to nominate team members or leads to participate in the upcoming OSTP/USGEO second portfolio assessment of civil Earth observations systems for the disasters and space weather SBAs.	SDR Members	June 12, 2014
Contact the SDR Secretariat (bret.schothorst@mantech.com) to participate in the SDR Wildland Fire S&T Task Force three-day workshop June 17-19, 2014 at the DOI Main Interior Building North Penthouse Room to inventory current agency roles and responsibilities and establish a resource baseline related to wildfire activities.	SDR Members	June 16, 2014
Contact SDR Co-chair Dennis Wenger (dwenger@nsf.gov) if your agency is able to provide funding support to the University of Colorado Boulder's Natural Hazards Center.	SDR Members and Federal Colleagues	ASAP
Reach out to Aubrey Miller (miller.aubrey@nih.gov) or April Bennett (april.bennett@nih.gov) for more information regarding an Institute of Medicine Forum on Medical and Public Health Preparedness for Catastrophic Events workshop that will be held June 12-13, 2014, on the campus of the National Institutes of Health in Bethesda, Maryland.	SDR Members and Federal Colleagues	ASAP
Contact Keely Maxwell (Maxwell.Keely@epa.gov) to attend an EPA workshop devoted to developing a Community Environmental Resilience Index July 22-23, 2014 at EPA's One Potomac Yard South Building in Arlington, Virginia.	SDR Members and Federal Colleagues	ASAP
Please consider supporting the work of the SDR and its Secretariat through a contribution from your agency. Let SDR Co-chair David Applegate (applegate@usgs.gov) know if you need an Agency- or Department-specific request letter.	SDR Members	Standing
Email the SDR Secretariat (bret.schothorst@mantech.com) and OSTP Liaison Tammy Dickinson (Tamara_L_Dickinson@ostp.eop.gov) if willing to pilot an assessment of the progress of the short-, mid-, and long-term goals outlined in the SDR <i>Grand Challenges for Disaster Reduction</i> hazard-specific implementation plans.	SDR Members	Standing
Contact OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) if it would be helpful for OSTP to issue a letter to your agency or department requesting new (or re-affirmed) designation of official representatives. Ideas for other entities that should be represented on the SDR are also welcome.	SDR Members	Standing